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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/737,148

12/16/2003

Si-Hoon Hong

SAM-0507

6022

7590

03/16/2006

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EXAMINER

CHOI, WOO H

ART UNIT

PAPER NUMBER

2189

DATE MAILED: 03/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/737,148

Applicant(s)

HONG, SI-HOON

Examiner

Woo H. Choi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 11-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-10 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/16/03, 03/21/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1 - 10, drawn to a USB flash device a memory capacity display window, classified in class 711, subclass 156.
 - II. Claims 11 - 12, drawn to an array of flash cells and a storage area for a last address used, classified in class 711, subclass 156.
 - III. Claims 13, drawn to a USB flash device with a folding portion, classified in class 711, subclass 103.
 - IV. Claims 14 – 15, drawn to a USB flash device with a memory capacity display window and a folding portion, classified in class 711, subclass 103.
2. Inventions I, II, III and IV are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because claim. Claim 1 is evidence that claim 14 does not require the particulars of claims in groups II and III. Likewise, claim 13 is evidence that claim 14 does not require the particulars of group I claims. Inventions I, II, and III are related as subcombinations usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is

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separately usable. In the instant case, subcombination I has separate utility such as a storage device for PCs and consumer electronic devices where it is useful for a human operator to know the remaining capacity of the device. Subcombination II can be used with a log structured file system where the knowledge of that last used location is useful. Subcombination III is useful in portable storage devices. See MPEP § 806.05(d).

3. Because these inventions are independent or distinct for the reasons given above and the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Anthony Onello on March 7, 2006 a provisional election was made without traverse to prosecute the invention of group I, claims 1 – 10. Affirmation of this election must be made by applicant in replying to this Office action. Claims 11 – 15 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 2, 4 – 8 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Conti (US Patent No. 6,816,071).

7. With respect to claims 1, 8 and 10, Conti discloses a USB flash memory device (figure 1, see also figure 6) for displaying a memory storage capacity, comprising:

a flash memory module including at least one flash memory (figure 1, 6, col.36 – 39, figure 6, 132);

a USB controller (figure 6, 310, 360) for controlling storage of data in and reading of data from the flash memory module;

a display controller for storing memory storage capacity information of the flash memory module in a usage display register (figure 6, 370, see also figure 3);

a display window (380) for displaying a value that is based on a content of the usage display register; and

a power unit for supplying power to the USB flash memory device (322, 320).

8. With respect to claim 2, the flash memory includes a state storage area in which the content of the usage display register is stored (col. 3, lines 48 – 67).

9. With respect to claim 4, the usage display register is directly controlled by the USB controller (the entire operation of the camera is controlled by the microprocessor 310).

10. With respect to claims 5 and 6, see figure 3
11. With respect to claim 7, the display window further displays current time, data storage time, or data transfer information (figure 1B, 40 for example shows the number of data items transferred to memory, 32 shows the resolution of pictures to be transferred, etc...).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Conti in view of Brake et al. (US Patent Application Publication No. 20030103156, hereinafter "Brake").

Conti discloses all of the limitations of the parent claim as discussed above. However, Conti does not specifically disclose that the graphic display comprises an LED array. On the other hand, Brake discloses that any of the various types of displays, including LED known in the art can be used for graphic display in digital cameras (page 2, paragraph 17). It would have been obvious to one of ordinary skill in the art, having the teachings of Conti and Brake before him at the time the invention was made, to use an LED array or any other well know display

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types in the digital camera of Conti as the designers saw fit depending on the design criteria or other criteria such as price, availability, customer preference, etc.

Allowable Subject Matter

14. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Woo H. Choi whose telephone number is (571) 272-4179. The examiner can normally be reached on M-F, 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Reginald Bragdon can be reached on (571) 272-4204. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read 'Woo H. Choi', with a stylized, flowing script.

Woo H. Choi

March 13, 2006